```
clear all;

% System parameters
a = 10; % signma
b = 14; % rho
c = 8/3; % beta

% Parameters
Tend = 50.0;
h = 0.002;

% Initialization
i = 1;
t(i) = 0;
x(i) = 1.0;
y(i) = 0;
z(i) = 0;

% Recursive scheme for Euler's method
while (t(i) + h < Tend + 1e-12)
    x(i+1) = (1 - a*h)*x(i) + h*a*y(i);
    y(i+1) = h*(b - z(i))*x(i) + (1 - h)*y(i);
    z(i+1) = h*y(i)*x(i) + z(i)*(1 - h*c);
    t(i+1) = t(i) + h;
    i = i + 1;
end

% Plot the solution
% x: horizontal axis, z: vertical axis
figure(1);
plot(x, z, '-');
legend('Numerical solution', 'Location', 'best');
xlabel('x');
ylabel('z');
```